

"APPROVED FOR RELEASE: 07/19/2001

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CIA-RDP86-00513R002064820007-2"

24(3), 24(2)

AUTHOR:

Zhirnov, V. A.

SOV/48-22-12-4/33

TITLE: On the Theory of Domain Walls of Piezoelectrics (K teorii domennykh stenok segnetoelektrikov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958,  
Vol 22, Nr 12, pp 1431 - 1432 (USSR)

ABSTRACT: In this work a quantitative estimate was made of the transition layer and of the surface energy connected with it for the 180° and 90° domains of barium titanate as well as of the 180° domains of Seignette salt. According to the calculations made, the estimate for the 180° domain walls of BaTiO<sub>3</sub> was  $\delta \approx 2 \cdot 10^{-7} \div 5 \cdot 10^{-8}$  cm. This corresponds with experimental results (Ref 1). For the dimension of the surplus surface energy connected with the existence of the 180° domain walls  $C \approx 10$  erg. cm<sup>-2</sup> was obtained. This value corresponds with that of reference 6. For the 90° domain wall of BaTiO<sub>3</sub>  $\delta \approx 10^{-6} \div 5 \cdot 10^{-7}$  cm was obtained, which is by about one unit of magnitude higher than for the 180° domain wall. For the surface energy of the 90° transition layer the result was  $\sigma_1 \approx 2 \div 4$  erg cm<sup>-2</sup>. Comparison with the

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## On the Theory of Domain Walls of Piezoelectrics

SOV/48-22-12-4/33

$180^\circ$  domains shows that in the  $90^\circ$  transition layer the small energy vector  $\vec{P}$  can change in a more favorable manner as the minimum value of the vector modulus is not 0 but  $P_0$

$\vec{P}_2$ . This explains the easy formation and displacement of the

$90^\circ$  domain walls. For the  $180^\circ$  domain wall of Seignette salt at  $T = 0^\circ\text{C}$   $\delta_2 \approx 1.2 \cdot 10^{-7} \text{ cm}$ ,  $\sigma_2 \approx 6 \cdot 10^{-2} \text{ erg cm}^{-2}$  and at

$T = 20^\circ\text{C}$   $\delta_2 \approx 2 \cdot 10^{-6} \text{ cm}$ ,  $\sigma_2 \approx 1 \cdot 10^{-2} \text{ erg cm}^{-2}$  was obtained.

The results obtained agree well with the work (Ref 7). The above mentioned estimates of the surface energy of the domain walls of piezoelectricity permit the investigation of various domain configurations corresponding with the limiting value of the thermodynamic potential. The author expresses his thanks to V. L. Ginzburg and Ye. M. Lifshits for valuable advice. There are 7 references, 3 of which are Soviet. Fizicheskiy institut Akademii nauk SSSR im. P. N. Lebedeva (Physics Institute of the Academy of Sciences USSR imeni P. N. Lebedev)

ASSOCIATION:

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SOV/56-35-5-18/56

24(3)

AUTHOR:

Zhirnov, V. A.

TITLE:

On the Theory of Domain Walls in Piezoelectrics (K teorii  
domennykh stenok v segnetoelektrikakh)PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,  
Vol 35, Nr 5, pp 1175-1180 (USSR)ABSTRACT: The experiments carried out by various authors (Refs 1,2) show  
that such domain structures occur in barium titanate single  
crystals if the vectors of spontaneous polarization form angles  
of 180 or 90° (180° or 90° domains) in the neighboring domains.  
From optical observations (Little) (Ref 1) it follows for the  
thickness of the transition domain between the 180° domains that  
 $d = 4 \cdot 10^{-8}$  cm and for 90° domains that  $d = 5 \cdot 10^{-5}$  cm. The sur-  
face energy of the 90° walls is lower than that of the 180°  
walls. A quantitative estimate of the thickness of the transi-  
tion layer and of the amount of the surface energy of 180- and  
90° domain walls is of interest. The author employs the method  
suggested by Landau and Lifshits (Ref 3) for the purpose of in-  
vestigating the domain structure of ferromagnetics. From the

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## On the Theory of Domain Walls in Piezoelectrics

SOV/56-35-5-18/56

condition of the thermodynamic equilibrium in the absence of an external field, the course of the variation of polarization in the intermediate field is determined, and also the thickness of the transition layer and the surface density of the energy which plays the part of the "coefficient of surface tension" of the domain walls. Proceeding from an ansatz for the thermodynamic potential  $\Phi$  near Curie (Kyuri) point in consideration of the cubic symmetry of barium titanate as a function of the (inhomogeneous) polarization vector  $P$ , the equilibrium variation of the spontaneous polarization vector is derived ( $\Phi \rightarrow \text{minimum}$ ). For the thickness of the transition layer and of the surface energy of the domain boundaries explicit expressions are obtained and numerical examples are used as e.g. for the 180° domain boundary of Rochelle salt:

at  $T = 0^\circ\text{C}$ :  $\delta \approx 1.2 \cdot 10^{-7} \text{ cm}$ ,  $\sigma \approx 6 \cdot 10^{-2} \text{ erg/cm}^2$

at  $T = 20^\circ\text{C}$ :  $\delta \approx 2.2 \cdot 10^{-6} \text{ cm}$ ,  $\sigma \approx 1.2 \cdot 10^{-2} \text{ erg/cm}^2$ .

The results obtained agree well with those of reference 8. In conclusion, the author thanks Professor V. L. Ginzburg and I. Ye. Dzyaloshinskiy for advice and discussions. There are 8 references, 2 of which are Soviet.

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On the Theory of Domain Walls in Piezoelectrics

SOV/56-35-5-18/56

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: May 19, 1958 (initially) and June 30, 1958 (after revision)

Card 3/3

ZHIRNOV, V.A.

Effective cross section of the photoionization of lithium ions.  
Zhur.eksp.i teor.fiz. 42 no.4:1097-1102 Ap '62. (MIRA 15:11)  
(Ionization) (Lithium)

243500

37113

S/056/62/042/004/028/037  
B125/B102AUTHOR: Zhirnov, V. A.

TITLE: Photoionization cross section of lithium ions

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,  
no. 4, 1962, 1097-1102TEXT: The matrix element of the transition dipole moment was determined  
on the basis of the wave function

$$\psi_d = Re^{-st} (1 + \beta u + \gamma t^2 + \delta s + \epsilon s^2 + \zeta u^2 + \chi_{s} su + \chi_{t} t^2 u + \chi_{u} u^2 + \chi_{st} t^2 u^2), \quad (1.3)$$

of the two-electron ground state of the  $\text{Li}^+$  ion ( $s, u, t$  - Hylleraas variables)  
and of the final-state wave function symmetrized over the two electrons,

$$\psi_e = \frac{1}{\sqrt{2}} (\psi(r_1) \chi_{10}(r_2) + \psi(r_2) \chi_{10}(r_1)). \quad (1.4).$$

Hence, the  $\text{Li}^+$  photoabsorption cross section was calculated from the Gauss  
recurrence formula by an "Ural-2" electronic computer with a maximum error  
of 0.5%. Because of the strong dependence of the matrix element on the  
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Photoionization cross section ...

S/056/62/042/004/028/037  
B125/B102

choice of the wave function, a great many variation parameters should be used. This complicates the calculations but yields highly dependable results. Thus,  $\sigma = 1.44 \cdot 10^{-18} \text{ cm}^2$  was found for the edge of the series. The hydrogen-like approximation cannot be used; Kramers' approximate formula with Haunt's quantum-mechanical correction gives the more correct value  $\sigma = 1.82 \cdot 10^{-18} \text{ cm}^2$ . The Li<sup>-</sup> photoabsorption cross section was calculated by S. Geltman's (Phys. Rev., 104, 346, 1956) approximation method with a "B3CM" ("BESM") electronic computer for a binding energy  $E = 0.80 \text{ ev}$  with a maximum error of 2%. The interaction of the free electron with the atomic trunc caused by the cut-off Coulomb potential is taken into account. For H<sup>-</sup> ions the results of this method agree well with the more comprehensive calculations by L. R. Heinrich (Astroph. J., 22, 59, 1944) and S. Chandrasekhar (Astroph. J., 102, 223, 395, 1945). The Li<sup>-</sup> photo-ionization cross section expressed by the dimensionless momentum  $k$  of the electron reads:

$$\sigma_\lambda = \frac{32\pi^2 \alpha a_0^3}{3} \frac{k^3 + A_0^3}{k} \left| \int_0^\infty \Psi_0 \chi_1 r^2 dr \right|^2. \quad (2.1)$$

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Photoionization cross section ...

S/056/62/042/004/028/037  
B125/B102

$\alpha$  is the fine-structure constant,  $s_0$  the Bohr orbit radius,  $k_0^2 = 0.0591$ ,  $\psi_0$  and  $\lambda_1$  are the radial parts of the wave function for bound and free electrons, respectively. The maximum radiation lies in the range accessible to usual infrared spectrographs. The  $\text{Li}^+$  photoabsorption cross section depends only slightly on the electron momentum. Therefore, the binding energy of the electron with the lithium atom can be determined from the measured position of maximum radiation of the  $\text{Li}^+$  ion in the continuous spectrum. L. A. Vaynshteyn is thanked for discussion; D. A. Mazurova, O. G. Nikolayeva, and E. A. Khesed for computations. There are 2 figures.

SUBMITTED: November 9, 1961

Fig. 1.  $\text{Li}^+$  photoionization cross section as a function of the stripped-electron momentum: Curve 1 was calculated from the wave function of the initial state with ten parameters (formula 1.3); curve 2 from the wave function of the initial state with three parameters ( $\alpha, \beta, \gamma$ ). f

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CIA-RDP86-00513R002064820007-2

TSAREGORODTSOV, O.I.; ZHIRNOV, V.D. (Moskva)

Simulation of disease, Vest. AMN SSSR 21 no.1, 3-9 '66.  
(MIRA 19:1)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

ZHIRNOV, V.D.

Exogenous and endogenous factors in etiology and pathogenesis.  
Vest. AMN SSSR 20 no.1:31-39 '65. (MIRA 18:4)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

CHEKURIN, V.P.; ZHIRNOV, V.D. (Moskva)

Social problems in medicine. Vest. AMN SSSR 18 no.2:88-92  
163. (MIRA 17:7)

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CIA-RDP86-00513R002064820007-2"

ZHIRNOV, V.G.

USSR/Electricity - Amplifiers

Card 1/1 : Pub. 133 - 17/20

Authors : Zhirnov, V. G.

Title : Improving the qualitative index of VUO-3000 amplifiers

Periodical : Vest. svyazi 10, 30-31, Oct 54

Abstract : Methods for improving the qualitative index of VUO-3000 amplifiers are presented. A short description of the above mentioned methods is given, together with formulas for calculating voltage and wiring. Diagrams.

Institution : ...

Submitted : ...

USSR/ Electronics - Measuring instruments

Card No.: 1 Part No.: 1

Author(s): Inzh. V. V. Kostylev et al.

Title: "Soviet electronic measuring instruments"

Periodical: Sov. elektronika i radiofizika

Abstract: A description of Soviet electronic measuring instruments

Summary: ...

ZHIRNOV, V.M.

Synchronous surveys in the Caspian Sea. Okeanologija 1 no.6:  
1097-1099 '61. (MIRA 15:1)  
(Caspian Sea--Hydrography)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRNOV, V.M.

In the Aral-Caspian section. Biul.Okean.kom. no.6:14 '60.

(MIRA 14:7)

(Caspian Sea—Oceanographic research)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

ZHIRNOV, V.M.

A new research ship on the Caspian Sea. Biul.Okean.kom. no.6:68  
'60. (MIRA 14:7)  
(Caspian Sea—Oceanographic research) (Antarctica (Ship))

ZHIRNOV, V.M.

Rise-and-flow oscillations of the water level at the western shore  
of the Middle Caspian and their relation with atmospheric processes.  
Trudy Okean. kom. 5:134-139 '59. (MIRA 13:6)  
(Caspian Sea--Hydrology) (Caspian Sea--Winds)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

GYUL', K.K.; ZHIRNOV, V.M.

Some characteristic features of contemporary oceanographic  
research. Uch. zap. AGU no.5:21-30 '55. (MLRA 9:12)

(Oceanographic research)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

ZHIRNOV, V.M.

Special features in hydrometeorological conditions along the shores  
of the central Caspian Sea in Azerbaijan. Izv. AN Azerb. SSR. Ser.  
geol.-geog. naum no.3:117-129 '60. (MIRA 13:10)  
(Caspian Sea—Hydrometeorology)

ZHIRNOV, V. M., Cand. Geogr. Sci. (diss) "Hydrometeorological System for Waters of the Western Shore of the Middle Caspian (From Samur River to the Region Neftyanykh Kamney)," Baku, 1961, 18 pp. (Azerbaijhan State Univ.) 150 copies (KL Supp 12-61, 257).

ZHIRNOV, V.M.

Caspian Sea problems in the center of attention. Izv.AN Azerb.SSR.  
Ser.geol.-geog.nauk i nefti no.3:99 '61. (MIRA 15:1)  
(Caspian Sea--Natural resources)

ZHIRNOV, V.M.

Conference on the Kara-Bogaz-Gol problem; session of the Caspian  
Section of the Oceanographic Commission. Okeanologiya 1 no.5:  
931-933 '61. (MIRA 15:3)  
(Kara-Bogaz-Gol (Gulf)--Congresses)

ZHIRNOV, V.Ya.

Our experience in the use of the Soviet preparation bilihnost in  
the examination of the gallbladder and bile ducts. Nauch. trudy  
Kaz. gos. med. inst. 14:427 '64. (MIRA 18:9)

1. Kafedra rentgeno-radiologii (zav. - prof. M.I.Gol'dshteyn)  
Kazanskogo meditsinskogo instituta.

BUDOVAY, G.T.; MARTINKOV, I.P.; SHKOL'NIKOV, B.Ya.; GRIGORYEV, Ye.A.;  
SOLOMIN, V.V.; REZNIK, A.I.; IGNATOVICH, A.A.; OZORNOV, A.K.;  
GILINSKOY, E.B.; ZHURNOV, V.Ye.; NEMENSKIY, M.I.; VOLKOV, N.I.,  
red.; VOSKANYAN, G.G., red.; KASIMOVSKIY, Ye.V., red.; FOMIN,  
A.Ya., red.; LISOV, V.Ye., red.; PONOMAREVA, A.A., tekhn. red.

[The district worker's manual; reference and methodological aid  
for economic and cultural planning in an administrative dis-  
trict] Spravochnik raionnogo rabotnika; spravochno-retodiche-  
skoe posobie po planirovaniyu khoziaistvennogo i kul'turnogo  
stroitel'stva v administrativnom raione. Moscow, Ekonomizdat,  
1962. 439 p. (MIRA 15:7)  
(Russia--Economic policy--Handbooks, manuals, etc.)

MAKHOTKIN, N.; KUZ'MIN, V., starshiy nauchnyy sotrudnik; ZHIRNOV, Ya.,  
starshiy nauchnyy sotrudnik

Development of the shipping of round timber in the Volga-Kama  
basin. Rech. transp. 24 no.3:16-17 '65. (MIRA 18:5)

1. Zamestitel' nachal'nika Upravleniya gruzovoy i kommercheskoy  
raboty Ministerstva rechnogo flota (for Makhotkin). 2. Gor'kovskiy  
institut inzhenerov vodnogo transporta (for Kuz'min, Zhirnov).

BORISOV, I., kand.tekhn.nauk; ZHIRNOV, Ya., inzh.

Novoil'insk roadstead must be preserved. Rech. transp. 21 no.2:  
7-9 F '62. (MIRA 15:3)  
(Kama River--Inland water transportation) (Novoil'insk--Rafts)

ACCESSION NR: AT4036166

8/0000/63/000/000/0211/0223

AUTHOR: Korpusov, G. V.; Krylov, Yu. S.; Zhirov, Ye. P.

TITLE: Laboratory multistep extraction assemblies for the separation of the rare-earth elements

SOURCE: AN SSSR. Institut geokhimii i analiticheskoy khimii. Redkozemel'nye elementy\* (Rare-earth elements). Moscow, Izd-vo AN SSSR, 1963, 211-223

TOPIC TAGS: rare earth, rare earth element, rare earth separation, geochemistry, analytical chemistry, extraction apparatus, countercurrent extraction, niobium, tantalum

ABSTRACT: In a preliminary review, the author describes and discusses five countercurrent or semi-countercurrent extraction assemblies designed by the authors and used for the separation of the rare-earth elements, niobium and tantalum. The assemblies are of the following types: (1) a glass extractor with air mixing for low-vapor-pressure organic solvents, whose construction and operation can be seen in the Enclosure; (2) a compact laboratory extraction unit composed of separate 10-cell standard polyethylene assemblies, with screw-mixers; (3) an enclosed extractor based on a mix-deposit principle and intended for a larger-scale process, the cells of which are partitioned into two compartments,

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ACCESSION NR: AT4035165

mixing, and depositing; (4) a semi-countercurrent laboratory extraction unit with air mixing, designed for a static heavy phase, with the other phase passing in succession through all the cells; and (5) a semi-countercurrent extractor unit for a static heavy phase with mechanical mixing, in which the light phase intermittently forms an emulsion with the heavy phase and, after layer separation in the next cell, moves on, while the heavy phase is recycled. Orig. art. has: 18 figures.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii AN SSSR (Institute of Geochemistry and Analytical Chemistry, AN SSSR)

SUBMITTED: 31Oct63

DATE ACQ: 30Apr64

ENCL: 01

SUB CODE: IC

NO REF SOV: 003

OTHER: 006

Card 2/3

ACCESSION NR: AT4035165

ENCLOSURE: 01-

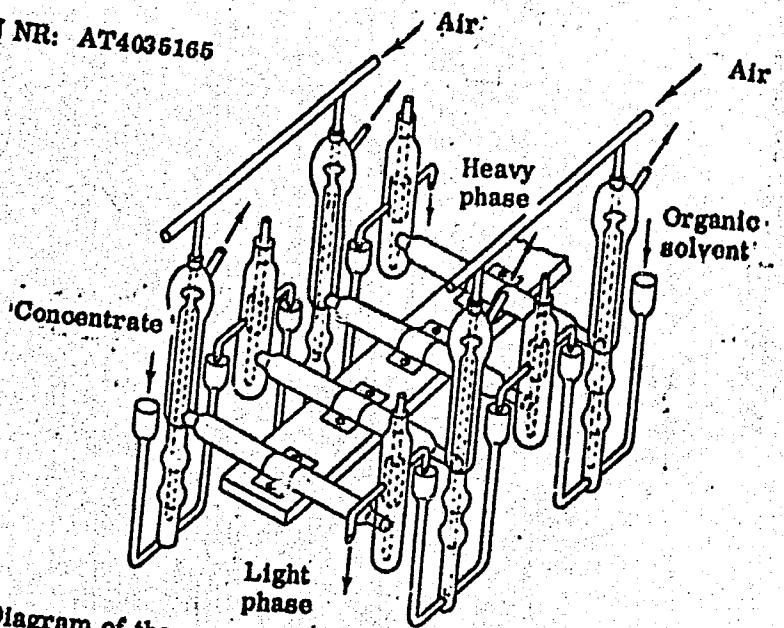


Fig. 1. Diagram of the way in which the countercurrent cells can be combined.

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USSR/Biology - Neurology

Card : 1/1

Authors : Roskin, G. I., Zhirnova, A. A., and Shornikova, M. V.

Title : Comparative histo-chemistry of sensitive cells of spinal ganglia and motor cells of the spinal cord

Periodical : Dokl. AN SSSR, 96, Ed. 4, 821 - 832, June 1954

Abstract : Nerve cells of various functional types can be characterized, not only morphologically, but also histo-chemically, which was proved by the study of the sensitive cells of spinal ganglia and motor cell of the spinal cord. The histo-chemical differences in an entire series of proteostatic components were not only of quantitative, but also of cyto-topographic order. Another significant moment is that the differences between two types of nerve cells pertain not only to the cytoplasm, but also to the nucleus. Two references.

Institution : The M. V. Lomonosov State University, Moscow, USSR

Presented by: Academician A. I. Abrikosov, April 5, 1954

ZHIRMUNSKII M.

ZHIRMUNSKII, A.

The main problems of the stratigraphy and geomorphology of the Quaternary deposits  
(Anthropozoic).

p. 311 (Moksliniai Pranesimai) Vol. 4, 1957, Vilnius, Lithuania

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

AUTHOR: ZHIRMUNSKII, A. M., Corresponding Member, Belarusian Academy of Science, Doctor of Geologic-Mineralogical Sciences 25-12-37/39

TITLE: A New Field of Science (Novaya otratl' nauki)

PERIODICAL: Nauka i Zhizn', 1957, # 12, p 61 (USSR)

ABSTRACT: The author reviews the book by G. V. Voytkevich "Radio-geology and Its Importance for Studying the History "Radio-Earth" (Radiogeologiya i yeye znachenie v poznaniu istorii zemli). This book is the latest contribution of Soviet scientists towards improving the knowledge on this particular field of science. Based on radiogeologic research, Voytkevich analyzes the problems of radioactive rocks of the earth. He proved that acid rocks have considerably higher radioactive properties than basic ones, whereby the radioactivity of mountain rocks of the same type varied greatly. He further proved the radioactivity of meteorites and the sun, which was found to contain large quantities of thorium. Five methods are being used at present to determine the elements lead, helium, xenon, argon and atomic fission of the elements.

Card 1/2

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ZHIRMUNSKIY, A.M.

Anthropozoic era. Izv.Vses.geog.ob-va 89 no.1:65 Ja -F '57.

(MLRA 10:3)

(Geology, Stratigraphic)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

AUTHOR: Zhirmunskiy, A.M. 11-58-7-9/12

TITLE: More About the Stratigraphic Dictionary of the USSR  
(Yeshchë o stratigraficheskem slovare SSSR)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1958,  
Nr 7, p 105 (USSR)

ABSTRACT: In addition to the articles by V.A. Grossgeym, V.Ye. Khain and T.A. Sikstel' published in Nr 10, 1957, of this periodical about the defects of the "Stratigraphic Dictionary of the USSR", edited by VSEGEI, the author mentions geological terms this dictionary omitted, though they were used in works of Academicians A.P. Pavlov and I.M. Gubkin. These words are: Antropogen (Anthropogen), Antropozoy (Anthropozoic Era), Gyunts (Gunzian Stage), Mindel' (Mindelian Stage), Riss (Rissian Stage), Vyurm (Wurmian Epoch), Neovyurm (Neo-Wurmian Epoch). The term "Antropozoyskaya era" (Anthropozoic Era) is recognized by the Academy of Sciences of Czechoslovakia, which, since 1951, published 5 volumes under the general name of "Anthropozoikum".

1. Geology 2. Dictionaries - USSR

Card 1/1

AUTHOR:

Zhirmunskiy, A.M.

SOV-12-90-4-17/22

TITLE: Results of the Conference at the AS USSR on Questions of  
Quaternary Geology (K itogam soveshchaniya pri A N SSSR po  
voprosam chetvertichnoy geologii)

PERIODICAL: Izvestiya Vsesoyuznogo geograficheskogo obshchestva, 1958,  
Vol 90, Nr 4, pp 390-392 (USSR)

ABSTRACT: An interdepartmental conference on the study of the Quaternary  
period took place in Moscow in May 1957. In view of the VIth  
International Conference of the INKVA (The International As-  
sociation on the Study of the Quaternary Period) which will  
take place in Warsaw in 1960, a Soviet section of the INKVA  
was formed under the direction of Academician I.P. Gerasimov.  
Reports on the Conference were read by: Academician I.P.  
Gerasimov, V.I. Gromov, V.P. Grichuk, A.I. Moskvitin, Ye.V.  
Shantser, P.K. Zamoriy, K.V. Nikiforova, I.L. Sokolovskiy,

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SOV-12-90-4-17/22

Results of the Conference at the A.S. USSR on Questions of Quaternary Geology

N.I. Nikolayev, I.I. Krasnov, S.A. Strelkov, G.F. Debets,  
P.I. Boriskovskiy, V.P. Cherdynsev, V. G. Gudelis and M.I.  
Neyshtadt. The majority of attending scientists rejected  
the name "Quaternary Period" and proposed instead the name of  
Antropogen, as man appeared on the Earth in the Pliocene epoch.  
The author proposes a new table for the stratigraphic scheme  
of the Antropogen era. There is 1 table.

1. Geology--USSR

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"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.M.

"Stratigraphic dictionary of the U.S.S.R." Reviewed by A.M. Zhirmunskii.  
Izv. AN SSSR Ser. geol. 23 no.7:105 Jl '58. (MIRA 11:9)  
(Geology, Stratigraphic--Dictionaries)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

ZHIRMUNSKIY A.M.

Czechoslovak achievements in the study of the Anthropozoic, based  
on collected works "Anthropozoikum" vol.1,1951-IV,1954. Biul.  
Kom. chetv. per, no.22:137-139 '58. (MIRA 11:11)  
(Czechoslovakia--Geology)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.M.

New stratigraphic diagram of the Anthropozoic. Dokl. AN BSSR  
3 no.5:220-221. My '59. (MIRA 12:10)  
(Geology, Stratigraphic)

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CIA-RDP86-00513R002064820007-2"

*CHIRMANSKY, A.M.*

24(8) TITLE: BOOK EXPDITIONS  
SOV/27058  
Vsesoyuznoye soveshchaniye po gotsernicheskim issledovaniyam. 1st, 1956.  
Problemy Gotsernil i Prakticheskoye Ispol'zovaniye Tekhnicheskoy Sredy, no. 2.  
(Geothermal Problems and the Practical Utilization of Technical Environment, No. 2).  
Transactions of the 1st All-Union Conference on Geothermal Investigations.  
Vol. 1) Moscow, Izd-vo Akad. Nauk, 1959. 254 p. Errata slip inserted.  
1,300 copies printed.

Scanning Agency: Anderson rank:SSM. Ordinance: geological/geophysical  
rank:

Ed. or Publishing House: L. V. Gerasimov, Tech. Ed.; T. N. Duseva, Editorial Board; V. I. Volodarski (Chairman); I. N. Argunov (Deceased); V. V. Ivanov, F. A. Makarenko, and E. Z. Rukarev.

PURPOSE: This book is intended for geologists, hydrogeologists, and geophysicists in general and petroleum and coal geologists in particular.

CONTENTS: This volume, one of two published on the subject, is a collection of 22 articles based on reports presented at the First All-Union Conference on Geothermal Problems held in March, 1956. The Conference was sponsored and organized by the Laboratory of Volcanology, the Laboratory of Hydro- and Analytical Problems (Dr. P. P. Savchenko), the Institute of Geochemistry and Analytical Chemistry, the Geophysical Institute, and was attended by 200 representatives of more than 50 research organizations. The material presented in this volume may be divided into three general categories: (1) general geothermal problems of the Earth; (2) various types and methods of geothermal research (3) problems, methods, and results of hydrogeological, hydrochemical, and geochemical problems. References accompany each article.

Makarenko, V. I. Different Types of Steam Hydrothermal Processes 12  
Ogurcov, J. A. Problems in the Theory of Temperature Fields as Applied to Geothermal Methods of Exploration 24  
Petrovskiy, V. V. Some Features of the Geothermal Problem in the Soviet Far East 27  
Petrovskiy, A. M. Problems of Geothermal Power 109  
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Rogovskiy, V. A. (Deceased) The Geothermics of the Donets Basin 226  
Rogovskiy, O. V. Data on the Geothermal Conditions in the Donets Basin and Adjacent Areas 236  
Al'tova, E. V. New Data on the Geothermics of the Crimea 244  
Chernovskiy, G. A. Results of Geothermal Studies in Siberia 246

ZHIRMUNSKIY, A.N. [Zhirmunski, A.N.]

Conclusions regarding the tectonics and geomorphology of  
the western part of the central Russian Platform. Vestsia AN  
BSSR. Ser. fiz.-tekhn. nav. no.1:63-68 '59. (MIRA 12:6)  
(Russian Platform--Geology, Structural)

ZHIRMUNSKIY, A.M.

"Anthropozoikum," vols.7-8 [in Chech]. Reviewed by A.M.Zhirmunskii.  
(MIRA 15:3)  
Trudy Kom.chetv.per. no.26:168-169 '61.  
(Geology)

ZHIRMUNSKIY, A.M.

New works about the Quaternary. Izv. Vses. geog. ob-va 92  
no. 3:290 My-Je '60. (MIRA 13:6)  
(Geology, Stratigraphic--Periodicals)

ZHIEMUNSKIY, A.M.

Fifth and sixth volumes of the Czechoslovak collected studies  
"Anthropozoikum." Biul.Kom.chetv.per. no.23:110-111 '59.

(MIRA 13:4)

(Czechoslovakia--Geology)

ZHIRMUNSKIY, A.V.

The problem of parabiotic nature of skeletal muscle reaction to  
denervation in mammals [with summary in English]. Fiziol.shur.  
44 no.6:577-585 Je '58 (MIRA 11:7)

1. Institut tsitologii AN SSSR, Leningrad.  
(MUSCLES, physiology,  
eff. of denervation, parabiotic reactions in mammals  
(Rus))

EXCERPTA MEDICA Sec 2 Vol 12/9 Physiology Sept 59

4285. PARABIOTIC NATURE OF THE REACTIONS INDUCED IN MAMMALIAN SKELETAL MUSCLE BY DENERVATION (Russian text) - Zhirnunskiy, A. V. USSR Acad. of Sci., Inst. of Cytol., Leningrad - FIZIOL. ZH. IM. SECH.

1958. 44/6 (577-585) Graphs 2 Tables 3 Illus. 2

It is suggested that the morphological and functional changes in denervated skeletal muscle are due to a state of 'parabiosis' (in Vedenski's definition).

Simonson - Minneapolis, Minn.

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064820007-2

Periodical

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064820007-2"

ZHUKOV, Yevgraf Konstantinovich; ZHIRMUNSKIY, A.V., redaktor; RULEVA, M.S.,  
tekhnicheskiy redaktor

[Studies on the tonus of skeletal muscles] Issledovaniia o tonuse  
skeletalnykh myshts. [Seningrad] Gos. izd-vo med. lit-ry, Leningradskoe  
otd-nie, 1956. 241 p.  
(MIRA 9:10)  
(MUSCLES)

TROSHIN,A.S.; NASONOV,D.N., professor, redaktor; ZHIRMUNSKIY,A.V., redaktor;  
ARONS,R.A., tekhnicheskiy redaktor

[Problem of cellular penetrability] Problema kletochnoi pro-  
nisaemosti. Moskva, Izd-vo Akademii nauk SSSR, 1956. 474 p.

1. Chlen-korrespondent AN SSSR (for Nasonov)  
(Cells) (MLRA 9:3)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.V.; MIKHAYLOV, V.P.

Dmitrii Nikolaevich Nasonov; on his 60th birthday. Vest.Len.un.11  
no.3:113-120 F '56. (MIRA 9:7)  
(Nasonov, Dmitrii Nikolaevich, 1895-)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

COUNTRY : USSR T  
 CATEGORY : Human and Animal Physiology, The Nervous System  
 ABS. JOUR. : RZhBiol., No. 5 1959, №. 22489  
 AUTHOR : Zhirmunskiy, A.V.  
 INST. : Academy of Sciences of the USSR  
 TITLE : The Alteration in the Vital Staining of the  
         Mouse Cerebral Cortex Associated with a Loud Sound.  
 ORIG. PUB. : Dokl. AN SSSR, 1957, 112, No. 3, 553--555  
 ABSTRACT : In a sound-proof chamber one series of mice  
           was subjected for 30 minutes to a continuous  
           sound (2500 cycles), and a second series was  
           subjected to an interrupted tone of the same  
           frequency. In the presence of the uninterrupted  
           tone the experimental animals were quiet and  
           dozed off frequently; there was no difference  
           in absorption of the dye (neutral red) by the  
           cerebral cortex from that seen in the controls.  
           With an interrupted tone, however, the mice were  
           excited, and absorption of the dye by the cortex  
 Card: 1/2

T-106

ABS. JOUR. : RZhBiol., No. 5 1959, №. 22489 T  
 AUTHOR :  
 INST. :  
 TITLE :  
 APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064820007-2

ORIG. PUB. :  
 ABSTRACT : was increased. Increased absorption of the dye  
           was noted in the parietal, but not in the tem-  
           poral lobe, a fact which indicates a difference  
           in the excitation of cortical cells in associa-  
           tion with motor excitation.--D.E.Ryvkina

Card: 2/2

COUNTRY : USSR T  
 CATEGORY : Human and Animal Physiology, Neuromuscular Physiol.  
 ABS. JOUR. : RZhBiol., No. 5 1959, №. 22388

COUNTRY	:	USSR	T
CATEGORY	:		
ABS. JOUR.	:	RZhBiol., №. 5 1959, №. 22338	
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	creased, then the affinity of the muscles for the dye progressively increased. Functional changes were noted in the denervated muscles. The tension-time curves of the denervated mus- cles shifted to the right and above in comparison with the curves of the control muscles. Short- term excitability underwent the greatest change. There was a triphasic change in long-term excit- ability of the denervated muscles. The injury potential of the denervated muscles was considerably less than that of nondenervated muscles. As early	
Card:	2/3		

T-79

COUNTRY	: USSR	T
CATEGORY	:	
ABG. JOUR.	: RZhBiol., No. 5 1959, No. 22388	
AUTHCR	:	
INST.	:	
TITLE	:	
ORIG. PUB.	:	
ABSTRACT	as the second day after transection of the nerve the injury potential of denervated sartorius muscles diminished by 19%, and by 41% on the 24th day. The changes in muscle substance and function following denervation indicate that the development of a parabiotic process lies at the base of the reaction of muscles to denervation. The phases of the reaction of the denervated muscles correspond to the phases of the parabiotic process.	
Card:	3/3	

Zhirmunskiy, A.V.

ZHIRMUNSKIY, A.V.

The problem of intraspecific differentiation in sea anemones.  
Vest. IGU 12 no.21:140-141 '57. (MIRA 10:12)  
(Sea anemones) (Salinity) (Zoology--Ecology)

ZHIRMUNSKIY, A.V.

Effect of sound intensitv on in vivo staining of the cerebral cortex in mice. Dokl. AN SSSR 112 no.3:551-555 Ja '57.  
(MLRA 10:4)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR. Predstavлено академиком Ye.N. Pavlovskim.  
(CEREBRAL CORTEX)

20-3-46/46

AUTHORS: Zhirmunskiy, A. V., and Kiseleva, M. I.

TITLE: The Adaptation of Black Sea Actinia to Increased Water-Salinity  
(Prisposobleniye chernomorskikh aktiniy k povyshennoy solenosti)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 3, pp. 517 - 520 (USSR)

ABSTRACT: The authors previously stated that the actinia of the Black Sea and of the Barent Sea, viz. of the same species: Actinia equina L. differ from each other by their sensitiveness against temperatures and salinity. The actinia from the Black Sea suffer high temperatures, but are more sensible against increased salinity than those from the North. These differences are in accordance with their conditions of existence. Two suppositions regarding the treatment of these differences were enounced: Either the actinia of the two afore-mentioned seas should be distinguished into two species, or they belong to "eurybiontic" species which are distinguished by high plasticity and aptitude of adaptation according to the conditions of environment and milieu. This aptitude of the actinia should be investigated with respect to change of the conditions of environment, i.e. of the salinity. The Black Sea actinia should get "accustomed" to increased salinity. Salt-concentrations were

Card 1/4

20-3-6/46

### The Adaptation of Black Sea Actinia to Increased Water-Salinity

produced, corresponding to those of the Barent Sea, viz. the salinity was increased from 1,44 % to 2,7 %. The test-series comprised: 1.) Immediate attainment of 2,7 %. 2.) within 4 days, 3.) within 8 days, gradually. In the first series the actinia withdraw their tentacles immediately, shranked up, and after 15 to 20 minutes they did no more react to any mechanic stimulus. In the 2nd and 3rd test series the actinia suffered well the increase of NaCl and behaved like the test animals. Only in the second series the actinia were contracted, whereas those from the second and third series were observed 10 days longer and did not differ from the test animals. Therefore, the actinia are able to adapt themselves to a substantial increase of salinity, if it occurs gradually.

Investigation on the sensitiveness of the animals accustomed to an increased salinity. The period of the loss of irritability against mechanic stimuli (narcosis period) was determined. The sensitiveness was calculated according to the shortness of the period of the setting-in of the narcosis (the value opposed to the narcosis period), after the actinia were put into sea-water of different NaCl-content. Only the 5,4 % content was examined. With not accustomed animals the narcosis set in already after 1 minute, whereas in the case of the accustomed actinia it lasted 23 minutes on the

Card 2/4

20-3-46/46

The Adaptation of Black Sea Actiniaes to Increased Water-Salinity

average. The statements of Pax are in accordance with these informations. He succeeded in keeping the actiniaes alive in intense brakish water (up to 4 % down). Consequently, actiniaes are to be considered as "euryhalinic" animals. Their high plasticity may be discussed. The experimental changes obtained by the authors, are apparently possible also under natural conditions, provided that the changes of environment do not proceed too rapidly. If this proves true, then the differences in sensitiveness against salinity from both Black Sea and Barent Sea, are no reason to divide these actinia in 2 species. There are 2 figures, 1 table, and 3 Slavic references.

Card 3/4

20-3-46/46

The Adaptation of Black Sea Actinia to Increased Water-Salinity

ASSOCIATION: Institute of Cytology and Sevastopol' Biological Station, AN USSR  
(Institut tsitologii i sevastopol'skaya biologicheskaya stantsiya  
Akademii nauk SSSR)

PRESENTED: July 1, 1957, by Ye. N. Pavlovskiy, Academician

SUBMITTED: July 1, 1957

AVAILABLE: Library of Congress

Card 4/4

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.V., MIKHAYLOV, V.P.

Dmitrii Nikolaeovich Nasonov, 1895-1957; an obituary. Vest AMN SSSR  
13 no.5:85-86 '58  
(NASONOV, DMITRII NIKOLAEVICH, 1895-1957)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.V.

Conference of the readers of "TSitologija." TSitologija 5  
no.4:481-483 Jl-Ag '63. (MIRA 17:8)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

POLYANSKIY, Yu,I.; ZHIRMUNSKIY, A.Y.; LEV, A.A.

Afanasi Semenovich Troshin; on his 50th birthday. Arkh.  
anat., glist. i embf. 44 po.2:116-119 F '63.  
(MIRA 17:2)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.V., kand.biolog.nauk

Symposium on Cytoecology, held at Leningrad. Vest. AN SSSR 33  
no.9;69-70 8 '63. (MIRA 16:9)  
(Ecology)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

ZHIRMUNSKIY, A.V.; SHLYAKTER, T.A.

Heat resistance of the organism of frogs and its cells in  
the experimental change of environmental temperature. Sbor.  
rab. Inst. tsit. no.6:78-86:63. (MIRA 16:8)  
(FROGS) (HEAT-PHYSIOLOGICAL EFFECT)

ZHIRMUNSKIY, A. V.

"A comparative study of cellular thermostability of marine invertebrates  
in relation to their geographic distribution and ecology."

UNESCO - International Symposium on the Role of Cell Reactions in Adaptations  
of Metazoa to Environmental Temperature.

Leningrad, USSR, 31 May - 5 June 1963

ZHIRMUNSKIY, A.V.

Reaction of cells of the ciliated epithelium in *Mytilus* and *Actinia*  
to increased salinity. Zhur. ob. biol. 23 no.2:119-126 Mr-Ap '62.  
(MIRA 15:5)

1. Institute of Cytology, U.S.S.R. Academy of Sciences, Leningrad.  
(EPITHELIUM) (MARINE FAUNA)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2

ZHIRMUNSKIY, A.V.

Work of the Scientific Council of the Academy of Sciences of the  
U.S.S.R. on the problem "The main questions of cytology".  
TSitologija 3 no.5:622-624 S-0 '61. (MIRA 14:10)  
(CYTOLOGY)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R002064820007-2"

ZHIRUMSKIY, A.V.

Research on temperature adaptations of invertebrates in the South  
China Sea. TSitologija 2 no.6:675-691 N-D '60. (MIRA 13:12)

1. Laboratoriya srovnitel'noy tsitologii Instituta tsitologii AN  
SSSR, Leningrad.

(CHINA SEA--INVERTEBRATES)  
(TEMPERATURE--PHYSIOLOGICAL EFFECT)

ZHIRMUNSKIY, A.V.; TSU LI-TSUN (TS'u Li-ts'ung)

Heat resistance of the ciliated epithelium of sympatric types of tropical mollusks of the genus Nerita in relation to the temperature conditions of the habitation. TSitologija 2 no14:478-482 Jl.-Ag '60.  
(MIRA 13:9)

1. Laboratoriya srovnitel'noy tsitologii Instituta tsitologii AN SSSR, Leningrad i Laboratoriya gerontologii Zoologicheskogo instituta AN Kitayskoy Narodnoy Respubliky, Pekin.  
(TEMPERATURE—PHYSIOLOGICAL EFFECT)  
(MOLLUSKS) (EPITHELIUM)

POLYANSKIY, Yu.I., otd.red.; ALEKSANDROV, V.Ye., red.; GINETSINSKIY, A.G., red.; ZHUKOV, Ye.K., red.; ZHIRMUNSKIY, A.V., red.; KARASIK, V.M., red.; KIRO, M.B., red.; LOZINA-LOZINSKIY, L.K., red.; NIKOL'SKIY, N.N., red.; PARIBOK, V.P., red.; ROMANOV, S.N., red.; SVETLOV, P.G., red.; SOKOLOV, I.I., red.; TROSHIN, A.S., red.; USHAKOV, B.P., red.; SHERSTOBITOV, O.Ye., red.izd-va; PEVNER, R.S., tekhn.red.

[Problems in cytology and general physiology] Voprosy tsitologii i obshchei fiziologii. Moskva, Izd-vo Akad.nauk SSSR, 1960.  
398 p. (MIRA 14:1)

1. Akademiya nauk SSSR. Institut tsitologii. 2. Institut evo-lyutSIONNOY fiziologii im. I.M.Sechenova AN SSSR, Leningrad (for Ginetsinskiy). 3. Fiziologicheskiy institut im. A.A.Ukhtomskogo pri Leningradskom universitete im. A.A.Zhdanova (for Zhukov). 4. Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR, Leningrad (for Karsik). 5. Institut tsitologii AN SSSR, Leningrad (for Kiro, Paribok, Sokolov). 6. Institut fiziologii im. I.P.Pavlova AN SSSR, Leningrad (for Romanov). 7. Laboratoriya embriologii Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad (for Svetlov). 8. Laboratoriya fiziologii kletki Instituta tsitologii AN SSSR, Leningrad (for Troshin). 9. Laboratoriya srovnitel'noy tsitologii Instituta tsitologii AN SSSR, Leningrad (for Ushakov).

(CYTOLOGY) (PHYSIOLOGY)

*LITKOVICH, H. V.*

Programs selected for the 10th Pacific Science Congress, Honolulu, Hawaii 21 Aug 6 Sep 1968

- BOGDANOV, B. A. - "Marine Hydrobiological Institute, Academy of Sciences USSR - Investigation into sterilization of organic substances of dead plankton under anaerobic conditions" (Section VII.C.1)
- BRODSTEIN, D. A. - "Institute of Oceanology" - "Some regularities concerning the seasonal distribution of chemical characteristics in the waters of the central part of the Pacific" (Section VII.C.1)
- BOUDOUT, S. A. - All-Union Scientific Research Institute of Marine Fishing and Oceanography - "Behavior of Salmonid Specimens - a new means for marine fishery investigations" (Section VII.C.1)
- BONOMOVA, M. P. - Institute of Oceanology - "The distribution of deep-sea hydrozoans in the Pacific in connection with food conditions" (Section VII.C.1)
- BONOMOVA, M. P. - Institute of Biology of Invertebrates or Marine Research Institute of Academy of Sciences USSR - "The behavior of illumination and the primary production of photophores in sea anemones" (Section VII.C.1)
- BONOMOVA, M. P. - Institute of Biology of Invertebrates, Academy of Sciences USSR - "The problem of bringing continental connection in the continental hydrozoan distribution" (Section VII.C.1)
- BORODIN, N. I., and SOKOLOV, V. A. - Institute of Oceanology - "The measurement of deep-sea currents with the application of nuclear power methods, apparatus, results" (Section VII.D.5)
- BORODIN, N. I., and SOKOLOV, V. A. - Institute of Oceanology - "Teletypographic communications in the Antarctic sector of the Pacific" (Section VII.D.1)
- BORODIN, N. I. - Institute of Geology - "New data on the tectonics of northern Kamchatka" (Section VII.C.)
- BORODIN, N. I. - Institute of Ethnology - "The ethnologic study of the peoples of Oceania in the USSR" (Section VII.D.2)
- BURGESS, G. B. - Institute of Oceanology - "Structure of evolution in the bottom topography of the Pacific Ocean" (Section VII.C.)
- VASIL'YEV, V. A. - Institute of Geology - "Cretaceous flora of the Pacific basin" (Section VII.C.)
- PALILOV, YU. E. - "Use of the USSR as a basis for the modification of sectional depths of the sea" (Section VII.C.)
- VENAKHINA, K. G. - Institute of Oceanology - "Geographical distribution of abyssal bottom fauna and the problem of vertical rotation" (Section VII.C.)
- VENAKHINA, K. G. - Moscow State University, Geographical Faculty - "Tectonic features of the seabed in the eastern Pacific" (Section VII.C.)
- PLATOV, N. M. - Institute of Geology - "The island arches and the peripacific fold areas in the western Pacific" (Section VII.C.)
- POLOVIN, N. M., and KIRILLOV, V. I. - Institute of North Physics Institute of N. N. Semenov - "Some possibilities in interpretation of surfaces of abyssal bottom" (Section VII.C.)
- ZHURAVLEV, A. A. - Institute of Geology - "The tectonic map of Pacific" (Section VII.C.)
- ZHURAVLEV, A. A. - Institute of Geology - "The geological history of the island arches of the South China Sea" (Section VII.C.)
- AMBERGER, J. M. - "The historical forestry problems in southern Africa" (Section VII.A.7)
- DEPP, W. H. - Director, Geographical Bureau, New York University - "The physiogeographical situation of the Subantarctic and the North Islands" (Section VII.D)
- ZAHAROV, T. D. - Institute of Geology - "On the relation between the upper continental and abyssal floras of Australia, New Zealand, and Tasmania" (Section VII.C.)
- ZEMCHIKOV, A. A. - Institute of Oceanology - "General characteristics of the quantitative and qualitative distribution of the bottom fauna in the Pacific" (Section VII.C.)
- ZEMCHIKOV, A. A., and ZEMCHIKOV, N. A. - Institute of Zoology - "The comparative study in methods of primary production investigation of freshwater plankton" (Section VII.C.)
- ZEMCHIKOV, A. A. - Institute of Cytology - "Cytophysiological investigation of reproductive adaptations of invertebrates in the northwestern area of the Pacific Ocean" (Section VII.C.)
- ZEMCHIKOV, A. A. - Institute of Geography - "Outline of southern ocean zoogeography" (Section VII.C.)

TROSHIN,A.S., otv. red.; ARRONET,N.I., red.; BEYER,T.V., red.;  
ZHIRMUNSKIY,A.V., red.; KUSAKINA,A.A., red.; PROSSER,  
I.L., red.; LOZINA-LOZINSKIY,L.K., red.; POLYANSKIY,  
Yu.I., red.; SUKHANOVA,K.M., red.; USHAKOV,B.P., red.;  
FEL'DMAN,N.L., red.; ALEKSANDROV, V.Ya., red.

[Cell and the temperature of the medium; transactions  
Kletka i temperatura sredy; trudy. Moskva, Nauka, 1964. 303 p.

(MIRA 18:1)

1. International Symposium on Cytoecology, Leningrad, 1963.
2. Institut tsitologii AN SSSR, Leningrad (for Troshin,  
Arronet). 3. Laboratoriya kosmicheskoy biologii Instituta  
tsitologii AN SSSR, Leningrad (for Lozina-Lozinskiy). 4. La-  
boratoriya tsitofiziologii i tsitoekologii Botanicheskogo in-  
stituta im. V.L.Komarova AN SSSR, Leningrad (for Aleksandrov).
5. Laboratoriya srovnitel'noy tsitologii Instituta tsitologii  
AN SSSR, Leningrad (for Zhirmunskiy, Kusakina, Ushakov).
6. Laboratoriya tsitologii odnokletchnykh organizmov Instituta  
tsitologii AN SSSR, Leningrad (for Sukhanova). 7. Botaniche-  
skiy institut imeni V.L.Komarova AN SSSR, Leningrad (for Arronet).

ZHIRMUNSKY, M. M.

USSR/Geophysics - Geopolitics

May/Jun 52

"Militarization and Ideological Degeneration of American Bourgeois Geography," M.M. Zhirmunsky,  
Inst of Geog, Acad Sci USSR

"Iz Ak Nauk SSSR, Ser Geogr" No 3, pp 27-40

States that American ruling circles, expressing the will of capitalistic monopolies, are striving to unleash a new world war with the purpose of plundering and enslaving other peoples and establishing world domination; they are endeavoring in every way to force science and technology to serve

216781

their aggressive aims. In the general plan for the militarization of science the American reaction is allotting very noteworthy attention to even geography; by means of bourgeois geography they are at of all surveying material on the USSR and other republics. Gives examples from American geographical writings.

216781

XHIRMUNSKIY, M.M.

Plundering of natural resources and waste of human resources in Latin American countries. Trudy Inst.geog. no.57:87-114 '53. (MLRA 7:1)  
(Spanish America--Economic conditions)

USER/Geography - Economic geography

Card 1/1 Pub. 45 - 15/17

Authors : Zhirmunskiy, M. M.

Title : Egypt. Excerpt from economic geography

Periodical : Izv. AN SSSR. Ser. geog. J, 106-108, May - Jun 1954

Abstract : A review is made of the book, "Egypt. Excerpts from Economic Geography", by L. Sh. Gordonov, published by the State Publishing Office for Geographical Literature in 1953, and containing 344 pages. The book deals largely with the problem of making an agricultural entry out of the desert through the use of the waters of the Nile river and attributes the poor economic condition of Egypt to the action of imperialistic powers during Egypt's colonial period.

Institution: ....

Submitted: ....

ZHIRMUNSKIY, M.M.

USSR/Geography - Publications

Card 1/1 : Pub. 86 - 36/40

Authors : Zhirmunskiy, M. M., Cand. in Geog. Sci.

Title : A progressive German geographical magazine

Periodical : Priroda 43/4, 119-122, Apr 1954

Abstract : A description is given of a German magazine, Zeitschrift fur Erdkundeunterricht (magazine for instruction in geography), which began publication in East Germany in 1951. Sample articles are analyzed and the magazine is rated to be of high quality. Four references: -11, R; 1-German (1954).

Institution : .....

Submitted : .....

ZHIRMUNSKIY, M.M.

New phenomena in the industrial geography of present-day Germany.  
Izv.AN SSSR.Ser.geog. no.6:36-47 N-D '56. (MLRA 10:1)

1. Institut geografii Akademii nauk SSSR.  
(Germany--Industrialization)

ZHIRMUNSKIY, M.M.

Formation factors in the geography of German industry. Izv. AN  
SSSR Ser. geog. no.2:67-79 Mr-Ap '57. (MIRA 10:12)

1. Institut geografii AN SSSR.  
(Germany--Economic geography)

Zhirmunskiy, M.M.

ALAMPIYEV, P.M.; GERASIMOV, I.P.; GORNUNG, M.B.; GOKHMAN, V.N.; ZHIRMUNSKIY,  
M.M.; KOVAL'EVSKIY, V.P.; KULAGIN, G.D.; MILNYKOVSKIY, A.G.; NEVSHADZE,  
M.I.; POPOV, K.M.; PULYARKIN, V.A.

A.S. Dobrov; obituary. P.M. Alampiev and others. Izv. AN SSSR. Ser.  
geog. no.4:143-144 J1-Ag '57. (MIRA 11:1)  
(Dobrov, Aleksandr Semenovich, 1901-1957)

ZHIRMUNSKIY, M.M.

AUTHOR

ZHIRMUNSKIY, M.M., candidate of economics

30-7-13/36

TITLE

As Guest of the Geographers of the German Democratic Republic

PERIODICAL

(V gostyakh u geografov Germanskoy Demokraticeskoy Respubliki. Russian)  
Vestnik Akademii Nauk SSSR, 1957, Vol 27, Nr 7, pp 65 - 66 (U.S.S.R.)

ABSTRACT

A delegation of Soviet geographers, among whom also was the author of this report, visited various scientific institutions. The main purpose of the visit, however, consisted of discussions of the treatise on the economic geography of Germany which was prepared by the Academy of Science of the U.S.S.R. One year after the visit of this delegation the vice-president of the German Academy of Science, Prof. W. Friedrich, agreed to appoint a group of specialists for the reviewing of the treatise. The author of this report held a lecture on the methodological principles of the research work. At the end of the meeting a heated discussion developed in the course of which still existing vaguenesses were eliminated. The visit of Democratic Germany did not only bring the delegation together with the Berlin colleagues, but also permitted a visit to the universities in Jena, Leipzig, and Greifswald as well as of the College of Paedagogics in Potsdam.

Not given

ASSOCIATION  
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ZHIRMUNSKIY, Mikhail Matveyevich; ZASUKHIN, Anat Arkad'yevich; IGRITSKAYA,  
Luchezara Borisovna; SITUTSKER, Nina Pavlovna; YANITSKIY, N.F.,  
doktor geograf.nauk, otd.red.; MARKOV, R., red.irkd-va; POLENOVA,  
T.P., tekhn.red.

[Germany; the economic geography of the German Democratic Republic  
and the German Federal Republic] Germania; ekonomicheskais  
geografiia Germanskoi Demokratischeskoi Respublik i Federativnoi  
Respubliki Germanii. Moskva, Izd-vo Akad.nauk SSSR, 1958. 708 p.  
(Germany--Economic conditions) (MIRA 12:4)

Zhirmunskiy, M.M.

AUTHOR:

Zhirmunskiy, M.M.

10-58-2-16/30

TITLE:

Current Problems of the Division of People's Democracies into  
Economic Districts (Aktual'nyye voprosy ekonomicheskogo rayon-  
irovaniya stran narodnoy demokratii)

PERIODICAL:

Izvestiya Akademii nauk SSSR - Seriya geograficheskaya, 1958,  
Nr 2, pp 120 - 129 (USSR)

ABSTRACT:

The problem of dividing the countries belonging to the Socialist camp into economic districts has often been the subject for discussion at Socialist conferences, such as the meeting in Bulgaria in 1952-53, in Rumania in 1956 and 1957, and in Czechoslovakia in 1956 and 1957. Soviet and Bulgarian geographers participated in the Rumanian conference and all countries of the East Bloc were represented in Czechoslovakia. Among the participants were supporters and opponents of this scheme. Professor I. Penkov and M. Penkova, A. Tsimm spoke in favor of it. Kh. Marinov, D. Markosh, M. Pechi and L. Sabo were in strong opposition. The author compares the capitalist and socialist systems with regard to the formation of economic districts. He finally comes to the conclusion that the administrative units of a country have to be taken as a basis for economic

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Current Problems of the Division of People's Democracies Into Economic Districts 10-58-2-16/30

districts, that the existing administrative units have to be changed and improved according to the political, economic and cultural necessities, or that very large economic districts comprising various oblast's and districts must be formed. There are 14 references, 9 of which are Soviet, 4 German and 1 Czech.

1. Economics—Development—USSR 2. Political science—USSR

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SOV/10-59-4-17/29

AUTHOR: Zhirmunskiy, M.M.

TITLE: Commemorating A. Humboldt in the GDR

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geograficheskaya, 1959, Nr 4, pp 126-130 (USSR)

ABSTRACT: The article covers a series of festive meetings on the occasion of the 100th anniversary of the death of A. von Humboldt, organized by the GDR government along with the German Academy of Sciences, the Humboldt University, the Geographical Society of the SZG, and the Freiburg Academy of Mining, during 5-20 May, 1959. The regular congress of the Geographical Society of the GDR also took place during these meetings. The meetings were attended by the representatives of 24 countries, both Western and Soviet bloc. The Soviet group of 18 scientists included 16 scientists from the two institutes of the Akademiya nauk

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Commemorating A. Humboldt in the SZG

SSSR (AS USSR), the Institut geografii (Institute of Geography) and the Institut istorii yestestvoznaniya (Institute of History of Natural Sciences), led by Academician D.I. Shcherbakov. In addition to this, there were two representatives of the Moskovskiy gosudarstvenny universitet (Moscow State University). The following personalities made reports there: Academician D.I. Shcherbakov, USSR, lectured on "The Role of A. Humboldt in the Development of Geology", Professor Doctor I. Penkov, Bulgaria, on "The Problem of Division into Districts in Bulgaria"; the author, (USSR), on "The Principle of Historism in Economic Geography"; Doctor I. Janko, Prague, on "The Development, Present-Day State, and Prospects of the Transportation Network of the CSR"; Professor I. Shandru, Rumania, on "The Cities of the Rumanian People's Republic and Their Classification".

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SOV/10-59-4-17/29

Commemorating A. Humboldt in the SZG

ASSOCIATION: Institut geografii AN SSSR (Institute of Geography  
AS USSR)

Card 3/3

ZHIRMUNSKIY, M. M.

"Principle of Historicity (historisme) in Soviet Economic Geography"

report to be submitted for the Intl. Geographical Union, 10th General Assembly  
and 19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.

ZHIRMUNSKIY, M. M.; YANITSKIY, N. F.

Methodological discussions in Moscow in a false interpretation  
of an American geographer. Izv. Vses. geog. ob-va 96 no. 2:91-95  
Mr-Ap '64. (MIRA 17:5)

ALAMPIYEV, P.M.; VOL'F, M.B.; ZHIRMUNSKIY, M.M.; KLUPT, V.S.; KONSTANTINOV, O.A.;  
MILEYKOVSKIY, A.G.; SEMEVSKIY, B.N.; FEYGIN, Ya.G.; SHISHKIN, N.I.;  
YANITSKIY, N.F.

In reference to IU.G.Saushkin's reply. Izv. AN SSSR. Ser. geog.  
no.3:156-158 My-Je '63. (MIRA 16:8)  
(Geography, Economic)

ZHIRMUNSKIY, M.M.

"West Berlin; political, economic and geographical aspects" by  
A.Zimm. Reviewed by M.M.Zhirmunskii. Izv. AN SSSR. Ser. geog.  
no.4:103-105 Jl-Ag '62. (MIRA 16:5)  
(Berlin, West—Economic geography) (Zimm, A.)

ALAMPTIYEV, P.M.; ZHIRMUNSKIY, M.M.; KLUPT, V.S.; KONSTANTINOV, O.A.;  
MILEJKOVSKIY, A.G.; SMEVSKIY, B.N.; FEYGIN, Ya.O.; SHISHKIN,  
N.I.; YANITSKIY, N.F.

Letter to the editors of the journal "Izvestiia AN SSSR, Seriia  
Geograficheskaiia." Izv.AN SSSR. Ser.geog. no.6:146-147 N-D '62.

(MIRA 15:12)

(Geography, Economic)

ZHIRMUNSKIY, M.M.

Tasks of the economic geography of socialist countries at the new  
stage of the development of the world socialist system. Izv.AN  
SSSR.Ser.geog. no.2:25-34 Mr.-Ap '63.  
(MIRA 16:4)

1. Institut geografii AN SSSR.

(Europe, Eastern--Division of labor)  
(Europe, Eastern--Economic/geography--Research)

ZHIRMUNSKIY, M.M.

Ways for the further development of economic geography. Izv.  
AN SSSR. Ser. geog. no.2:104-115 Mr-Ap '62. (MIRA 15:3)  
(Geography, Economic)

ZHIRNOVA, A. A.

ZHIRNOVA, A. A. - "Morphological and histochemical changes in the motor cells of the thoracic portion of the spinal cord and in the pyramidal cells of the motor region of the cerebral cortex of rats at various stages of ontogenesis." Moscow, 1955. Moscow State University M. V. Lomonosov. (Dissertations for degree of Candidate of Biological Sciences.)

SO: Knizhnaya letopis', No 48. 26 November 1955. Moscow.

KRYKHTIN, M.L.; ZHIRNOVA, A.A.

Studying the decomposition of egg membranes in the fall-spawning  
keta of the Amur River. Vop. ikht. no.12:101-106 '59.  
(MIRA 13:4)

1. Amurskoye otdeleniye Tikhookeanskogo nauchno-issledovatel'-  
skogo instituta rybnogo khozyaystva i okeanografii (TINRO)  
i Khabarovskiy meditsinskiy institut.  
(Amur River--Salmon--Diseases and pests)  
(Ovum)

AUTHOR ZHIRNOVA, A. A.

TITLE ALOV, I.A., ZHIRNOVA, A.A. Quantitative Changes of Cell Nuclei Acids In the Context of the Mitotic Activation by Albumin. 20-1-53/64  
(Izmereniya soderzhaniya nukleinovykh kislot kletki v sviazi s aktivatsiyey mitozov belkom - Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 1, pp 192 - 194 (U.S.S.R.)

ABSTRACT One of the characteristic properties of the regenerative process is the sudden outburst of cell division. So far, the mechanism of the release of mitoses at the reparative regeneration has not yet been clarified. It was proven in earlier investigations that mitoses are activated in the regenerating tissues by albuminous products of the disintegrating (damaged) neighboring cell. The experiments which are described in the paper under review and which were carried out in white mice led to the following results: The penetration of albumin into the directly damaged organ causes an increase of nucleic acids in the cells. Simultaneously with the change of the amount sudden growth(hypertrophy) of the cell. However, it is not possible to solve the problem whether cell division or hypertrophy are just two different stages of the same process, or whether we have to consider them as parallel developments. A chart gives a survey of the different changes of the cell circumference, corresponding to the stage after the introduction of albumin (1 Chart).

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Quantitative Changes of Cell Nuclei Acids In the Context of 20-1-53/64  
the Mitotic Activation by Albumin.

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ZHIRNOVA, A.A.

Effect of mitotic regulators on the cellular content of nucleic acids [with summary in English]. Biul.eksp.biol. i med. 46 no.10:96-100 0 '58 (MIRA 11:11)

1. Iz kafedry gistolologii (zav. - doktor meditsinskikh nauk I.A. Alov) Khabarovskogo gosudarstvennogo meditsinskogo instituta. Predstavlena deyatvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(EPINEPHRINE, effects, on cell division & nucleic acid content (Rus))

(CORTISONE, eff. same (Rus))

(CELL DIVISION, eff. of durgs on, cortisone & epinephrine (Rus))

(NUCLEIC ACIDS, metab. eff. of cortisone & epinephrine (Rus))